EGS CONFIDENCE TEST EXECUTION COVER SHEET

1. Test ID and Title: EOC - ASTER GDS Interface Confidence Test - ICT14

2. Test Conductor / Test Lead: Steven War

3. Planned Execution Date: _____

4. Actual Execution Date: _____

5. Planned Configuration:

Hardware: ASTER ICC, ASTER SDPS, ADN, JPL, EBnet, P&S, Command Management and T & C Processing

Software: EOC Software and ASTER Software

6. "As Run" Configuration:

7. Package items planned for execution:

   (List test cases or steps planned for execution, e.g. ICT10.1, ICT10.2 steps 2-5, etc.)

8. Package items actually executed and deviations from currently published procedures.

9. Results

   a. Capabilities successfully demonstrated

   b. Capabilities not successfully demonstrated

   c. Requirements verified

   d. Discrepancy Reports submitted

10. Lessons Learned

EOC - ASTER GDS Interface Confidence Test - ICT14

Test Objectives:

Exercise bulk data (mission data) flow at nominal and maximum rates and the ability to transfer and respond to all message data types. Error and exception handling will be exercised for custom protocols, but not for COTS/standard protocols supporting the interface. Specifically, for ASTER,

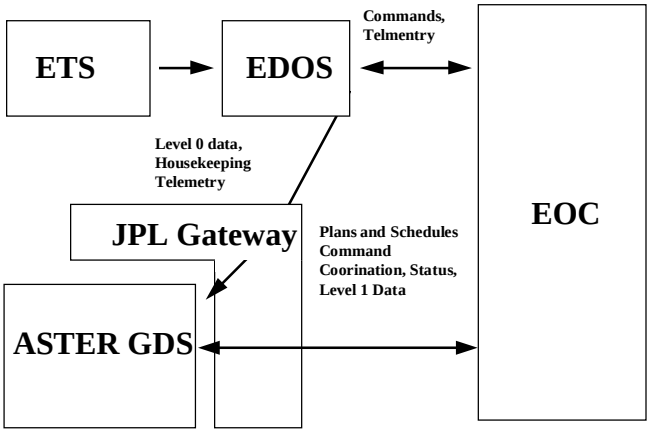
- Ensure verification of users attempting to gain access to either EOSDIS or to ASTER GDS via the ASTER GDS to EOSDIS interface.
- Verify the ability of the EOC to send updates to the EOC operations database to ASTER GDS.

Requirements to be Verified:

ASTER-110#B ECS shall have the capability to send and ASTER GDS shall have the capability to receive DARs for the ASTER instrument. DARs shall contain the following information, at a minimum:

a. Observation number
b. Experimenter identification
c. Experimenter address
d. Investigation identification
e. Scientific discipline
f. Observation repetition period
g. Tolerance in observation time
h. User priority
i. Scheduling priority and target of opportunity flag
j. Descriptive text
k. Location data expressed in terms of longitude and latitude as earliest start coordinates and latest stop coordinates
l. Earliest start time
m. Latest stop time
n. Minimum coverage required
o. Maximum coverage desired
p. Associated product generation request and product distribution request
q. Pointing angle
r. Calibration requirements
s. Coordination requirements
t. Data transmission requirements
u. Illumination requirements (day/night)
v. Specific time of observation
w. Sun angle
x. Direct downlink option

Test Configuration:



Participants and Support Requirements:

Participants:

EOC M&O
ASTER M&O
EBnet M&O
JPL M&O
ADN M&O
I&T TC

Comm:

Voice: Phone

Data: EBnet- circuit from EOC - ASTER GDS
(includes JPL Gateway and ADN)

Equipment & Software:

Hardware:

ASTER ICC
ASTER SDPS
ADN
JPL
EBnet
P&S
Command Management
T & C Processing

Software:

EOC Software
ASTER Software

Test Tools: ETS

Test Data:

Description / Characteristics	Source	File/Script & Location
Plans, Schedules, and Coordination Messages	FOT / ASTER Instrument Team	
Housekeeping Data	Spacecraft simulator	

References:

GSFC/MO&DSD, 510-ICD-EDOS/ASTER, ICD Between EDOS and ASTER GDS, January 19, 1996.

Test Case Descriptions:

ICT 14.1 User Authentication
This tests verifies the ability to verify users attempting to gain access to either EOSDIS or to ASTER GDS. Both valid and invalid attempts will be made.

A Valid EOSDIS user attempts to log on to their workstation and requests ASTER GDS privileges. ECS sends user authentication request to ASTER GDS. ASTER GDS checks to ensure user is authorized and, once that is established. sends user authentication information to ECS. User gains access to ASTER GDS and views several ASTER datasets.

An invalid EOSDIS user attempts to log on to their workstation and request ASTER GDS privileges. ECS sends user authentication request to ASTER GDS. After ASTER GDS determines that the user is unauthorized, it sends that authentication information to ECS. User is denied access to ASTER GDS. User attempts to access ASTER GDS anyway, and ensures their attempts are denied.

A valid ASTER GDS user logs on to their workstation and requests ECS privileges. ASTER GDS sends user authentication request to ECS. ECS determines user is authorized and sends user authentication information to ASTER GDS. User is granted access to EOSDIS and views several CERES data sets.

An invalid ASTER GDS user attempts to log on to their workstation and requests ECS privileges. ASTER GDS sends user authentication request to ECS. ECS determines that the user is unauthorized, and sends that user authentication information to ASTER GDS. User is denied access to EOSDIS. User attempts to access EOSDID information anyway and ensures their attempts are denied.

A valid ASTER GDS user logs onto the system from a specific workstation. Once they are able to access the EOSDIS database, they move to a second workstation and attempts to log on, as the same user, a second time. Unsure if this is permitted, or if it isn't what message comes up

Requirements to be Verified: TBD

ICT 14.2 Database Updates

This test verifies the ability of the EOC to send updates to the EOC operations database to ASTER GDS. A user signs on to the Test User Station and edits a specific file in the EOC operations database. This user now saves and stores those changes . An ASTER GDS user signs on to their workstation and views that updated database and ensures the appropriate changes have been made. This user than makes modifications to two ASTER Databases, one does not interfer with any other test and a second which will ensure that it is in conflict with another instrument's activity. The ASTER GDS user than saves and stores the information. The ASTER GDS user ensures that they receive proper notification of the conflict.

Requirements to be Verified: TBD

ICT 14.3 ASTER Planning & Scheduling Interface

An ASTER user logs onto their workstation and requests the planning and scheduling products related to ASTER's short term schedule and ASTER's one day schedule. They also view the Preliminary Resource schedule, the Activity schedule and the Detailed Activity Schedule. After ensuring that each of these schedules are available to the ASTER

user, they submit a Request for EOC Schedule. Following the receipt of this schedule, they use the Planning Aids to update an ASTER schedule.

Requirements to be Verified: TBD

ICT 14.4 ASTER Command Interface (Real time and Nonreal time)
From the ASTER ICC, several Real Time Command Requests will be submitted. The ASTER ICC user will receive notification of the Real time commands. The user will also review relative time command sequence command procedures, and will update several ASTER commands and telemetry definitions.

Requirements to be Verified: TBD

ICT 14.5 Reports

The ASTER user will request an ATC Load Report , Integrated Report, Instrument Status Report, Spacecraft Status Report , and Overall AM-1 Mission Status Report . Each of these reports will be checked to ensure the proper information was received.

Requirements to be Verified: TBD

Test Procedures:

Test Set-up:

Step	Station	Action	Expected Results	Comments
1.	EOC	Log onto the FOS user workstation and initialize necessary subsystems Record the system configuration on the execution cover sheet	FOS logical string is configured for test execution	
2.	EOC	Bring up event page		

(rest is TBS)

Test Execution:
TBS

ICT 14.1 User Authentication

ICT 14.2 Database Updates

ICT 14.3 ASTER Planning & Scheduling Interface

ICT 14.4 ASTER Command Interface (Real time and Nonreal time)

Test Termination:

Step	Station	Action	Expected Results	Comments
1.	EOC	Collect all necessary screen snaps, dumps, etc. needed for post-test analysis and verification		
2.	EOC	Reconfigure the system to pre-test configuration		
3.	EOC	Log off of the FOS user workstation		